

PATENT COOPERATION TREATY

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From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

To:

DE HOOP, Eric
Octrooibureau Vriesendorp & Gaade
P.O. Box 266
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Kopie gemaakt voor
schaduw dossier -
Den Haag

Date of mailing
(day/month/year)

01.02.2005

Applicant's or agent's file reference
PCTP171092A

IMPORTANT NOTIFICATION

International application No.
PCT/NL 03/00864

International filing date (day/month/year)
05.12.2003

Priority date (day/month/year)
05.12.2002

Applicant

BAGGERMAATSCHAPPIJ BOSKALIS B.V. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



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PATENT COOPERATION TREATY



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCTP171092A		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/NL 03/00864		International filing date (day/month/year) 05.12.2003	Priority date (day/month/year) 05.12.2002
International Patent Classification (IPC) or both national classification and IPC E02D3/10			
Applicant BAGGERMAATSCHAPPIJ BOSKALIS B.V. et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 3 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 01.07.2004		Date of completion of this report 01.02.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Scharl, W Telephone No. +49 89 2399-2489 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/NL 03/00864**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-22 as originally filed

Claims, Numbers

1-16 filed with telefax on 29.11.2004

Drawings, Sheets

1/14-14/14 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence... listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/NL 03/00864**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).
- (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*
6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:
- ☐ the entire international application,
 - ☒ claims Nos. 16
- because:
- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
 - ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 16 are so unclear that no meaningful opinion could be formed (*specify*):
- see separate sheet**
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
 - ☐ no international search report has been established for the said claims Nos.
2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:
- ☐ the written form has not been furnished or does not comply with the Standard.
 - ☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-15
	No: Claims	
Inventive step (IS)	Yes: Claims	1-15
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/NL 03/00864**

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/NL 03/00864

1. Claim 16 contains references to the description and/or the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here.

Moreover, since there are no structural features defined in said claim, it is not clear for which subject-matter protection is sought.

2. The closest prior art is described in WO-A-02/29164 (D1) cited in the present application and corresponding to document US-A-2002/122695 cited in the international search report.

D1 discloses a system for withdrawing liquid, in particular water, from a soil area, such as for consolidating it, comprising a series of spaced apart draining means extending substantially vertically downwardly in the soil, and a substantially horizontal drainage line which, in a transitional area, changes into a pump line leading to a pump positioned outside of the soil area to be treated. Said drainage line is arranged in the soil for receipt of the soil fluid passed through the downwardly extending drainage means. The horizontal drainage pipe extends in an uninterrupted way up to the pump placed on the surface level.

The object of the present invention is to solve the problems arising from the prior art system and to provide a system for withdrawing liquid from a soil area, which system is capable of following smoothly the movement of settlement of the soil area from which liquid is withdrawn.

According to claim 1, this is accomplished in that an oversize of line length is provided in said transitional area prior to making the system operational, the oversize being designed as a slide connection with an overlap between two line ends that are inserted into each other.

Such a slide connection in a drainage line is, in respect of the available prior art, novel in concept, and, moreover, there is no teaching in the available prior art which could have led the skilled person to the system claimed in claim 1.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/NL 03/00864

Document US-A-3 518 831 concerns an apparatus for subterranean irrigation wherein a bellows-shaped sleeve is arranged in the water supply pipes. Documents NL-A-6 904 048 and FR-A-2 285 565 both relate to end pieces of a pipe line, and not to a connector between two pipe portions.

The subject-matter of claim 1 is therefore both novel and involves an inventive step. The claimed system is also industrially applicable. Therefore, claim 1 meets the requirements of Article 33(2), (3) and (4) PCT.

3. Dependent claims 2 to 13 describe further embodiments of the system of claim 1. Therefore, said claims meet also the requirements of Article 33 PCT.
4. This is also the case with independent claims 14 and 15 which concern an assembly for withdrawing liquid, comprising a number of systems according to claim 1.
5. The description, in particular page 3, is not in conformity with the claims as required by Rule 5.1(a)(iii) PCT.

Claims (Amended)

1. System for withdrawing liquid, in particular water, from a soil area, such as for consolidating it, comprising a series of spaced apart draining means extending downwardly, in particular substantially vertically, in the soil and a substantially horizontally extending drainage line, which is arranged in the soil for receipt of the soil fluid passed through the downwardly extending drainage means and which in a transitional area in a border area of the soil area to be treated, such as to be consolidated, changes into a pump line which leads to a pump positioned outside of the soil area to be treated, an oversize of line length being provided in the transitional area prior to making the system operational, the oversize being designed as a slide connection with an overlap between two line ends that are inserted into each other.
2. System according to claim 1, the oversize having at least a length which at a minimum is adjusted to the expected settlement.
3. System according to claim 1 or 2, the transitional area being situated near the outermost downwardly extending drainage means.
4. System according to claim 1, 2 or 3, the line ends being formed by a discharge end of the drainage line and a receiving end of the pump line, which at the location of the slide connection can be slid into each other and forming an overlap at that location.
5. System according to claim 4, the receiving end of the pump line being slidably accommodated in the discharge end of the drainage line.

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5. System according to claim 4 or 5, the slide connection comprising a sleeve part and a clamping part for securing the discharge end of the drainage line to the sleeve part by clamping about it, the sleeve part slidably holding the receiving end of the pump line.

7. System according to claim 6, a sealing being arranged between the sleeve part and the receiving end of the pump line.

8. System according to any one of the preceding claims, the slide connection being provided with a limiter which is active in the direction of mutual approach of the discharge end of the drainage line and the receiving end of the pump line.

9. System according to any one of the preceding claims, the discharge end being detachably attached to the end of a drainage line, such as by means of a snap connection.

10. System according to claim 9, the slide connection being accommodated within a sleeve that is part of the discharge end.

11. System according to any one of the preceding claims, wherein the downwardly extending drainage means are elongated and spaced from each other.

12. System according to claim 11, wherein the downwardly extending drainage means are formed by drainage strips/ribbons.

13. System according to any one of the preceding claims, wherein the horizontal extending drainage line is covered by an air sealing layer.

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14. Assembly for withdrawing liquid, in particular water, from a soil area for consolidating it, comprising a number of systems according to any one of the preceding claims, which each are connected to a central pump with their own pump line.

15. Assembly for withdrawing liquid, in particular water, from a soil area for removing substances from the soil area, comprising a number of systems according to any one of the claims 1-13, which each are connected to a central pump with their own pump line.

16. System for withdrawing water from a soil area, provided with one or more of the characterising measures described in the attached description and/or shown in the attached drawings.